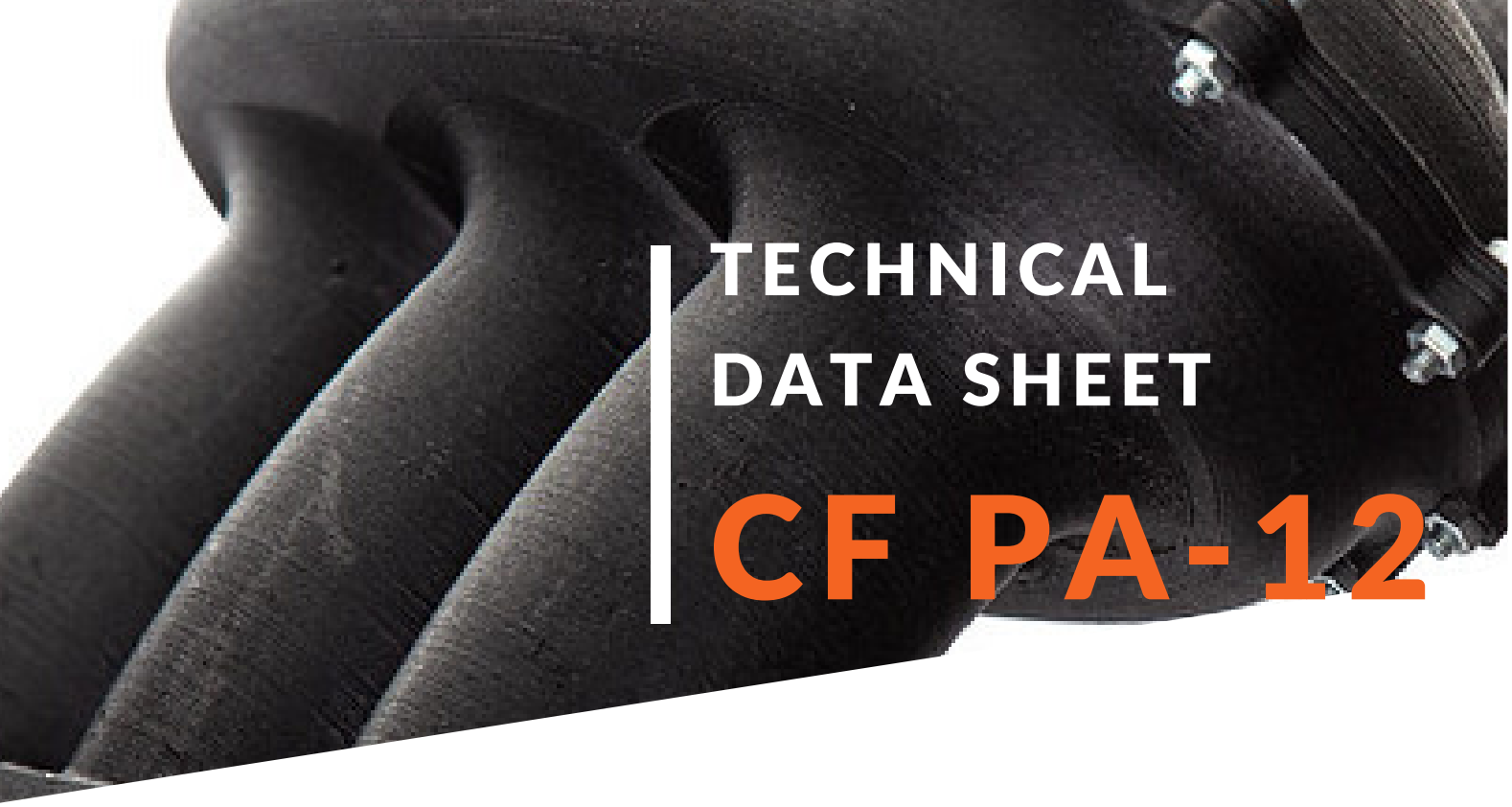
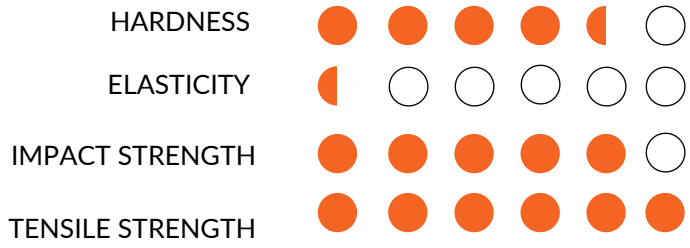


TECHNICAL DATA SHEET

CF PA-12

CF PA-12 - material that never fails on a race track – this is how we can dub the CF-PA-12 filament – a composite material enhanced with carbon fibre, which has found its use in 3D printing. It is particularly solid, highly stiff and resistant to ripping. The last feature is of particular interest here because carbon fibre is 2.5 times more durable than the popular ABS-42.



PHYSICAL PROPERTIES

	VALUE	UNIT	TEST METHOD
Density	1,08	g/cm^3	ISO 1183
Longitudinal shrinkage	0,15 - 0,3	%	ISO 294-4
Transverse shrinkage	0,2 - 0,6	%	ISO 294-4

MECHANICAL PROPERTIES

	VALUE	UNIT	TEST METHOD
Tensile strength	105	MPa	ISO 527-1
Tensile elongation	4,1	%	ISO 527-1
Charpy impact strength 23°C	12	kJ/m^2	ISO 179-1eA

THERMAL PROPERTIES

	VALUE	UNIT	TEST METHOD
Heat Deflection Temperature 0,45 MPa	169	°C	ISO 79
Heat Deflection Temperature 1,8 MPa	154	°C	ISO 79
VICAT Softening Temperature	173	°C	ISO 306

ELECTRICAL PROPERTIES

	VALUE	UNIT	TEST METHOD
Surface resistivity	4*10^8	Ω/cm^2	ASTM D257

RECOMMENDED PRINTING PARAMETERS

Nozzle temperature

240 - 260°C

Bed temperature

75-100°C

Heated chamber

50°C